## IN THE CLAIMS

Please amend claims 9-12, 14, and 15 and withdraw claims 1-8 as follows:

1.(Withdrawn) An optical throughput condenser comprising:

a transmissive substrate

an angle gate created via a thin film dielectric coating deposited on the transmissive substrate such that light striking the coated surface with a range of gate angles less than or equal to the gate angle transmits through the thin film, while light striking the coated surface with a range of gate angles greater than the gate angle reflects back from the thin film; and

an integrating sphere positioned such that light reflecting back from the thin film is directed towards the integrating sphere so that the light is subsequently redirected towards the angle gate.

2.(Withdrawn)The optical throughput condenser of claim 1, wherein the angle gate is defined by an angle of incidence of the thin film.

3.(Withdrawn)The optical throughput condenser of claim 1, wherein the thin film has a sharp angularly dependent transmission.

4.(Withdrawn)The optical throughput condenser of claim 1, and further comprising:

a final product of light equaling all light striking the thin film within the angle gate and transmitted through the thin film.

5.(Withdrawn)The optical throughput condenser of claim 1, and further comprising:

a plurality of micro retro reflectors positioned on a portion of the integrating sphere.

6.(Withdrawn)The optical throughput condenser of claim 5, wherein the plurality of micro retro reflectors are positioned on the portion of the integrating sphere to substantially reverse an incident ray direction of the light reflected back from the thin film.

7.(Withdrawn)The optical throughput condenser of claim 1, and further comprising:

an illuminating source positioned within the integrating sphere.

8.(Withdrawn)The optical throughput condenser of claim 1, and further comprising:

a first illuminating source positioned outside of the integrating sphere; and

a second illuminating source positioned within the integrating sphere.

9.(Currently Amended) An optical illumination system comprising:

an illuminating source capable of providing light transmissions having a range of angles;

a transmissive substrate;

~~an angle gate created via a thin film dielectric coating deposited on the transmissive substrate~~ a thin film coating positioned on a surface of the transmissive substrate, the thin film coating including a gate angle such that light transmissions striking the ~~coated surface~~ thin film coating with ~~a range of gate angles~~ an angle less than or equal to the gate angle transmits through the thin film, while light transmissions striking the ~~coated surface~~ thin film coating with ~~a range of gate angles~~ an angle greater than the gate angle reflects back from the thin film; and

an integrating sphere positioned such that light transmissions reflecting back from the thin film is directed within ~~towards~~ the integrating sphere ~~so that the light is~~ and subsequently redirected towards the thin film coating~~angle gate; and~~

~~wherein the portion of light directed towards the integrating sphere is redirected towards the angle gate~~.

10.(Currently Amended) The optical illumination system of claim 9, ~~and further comprising:~~ wherein

a final product of light is generated equaling the combination of all light transmission ~~angles striking the thin film within the range of gate angles and~~ transmitted through the thin film.

11.(Currently Amended) The optical illumination system of claim 9, and further comprising:

a plurality of micro retro reflectors positioned on a portion of an inner surface of the integrating sphere.

12.(Currently Amended) The optical illumination system of claim 11, wherein the plurality of micro retro reflectors are positioned on the portion of the integrating sphere to substantially reverse an incident ray direction of the portion of light transmission reflected back from the thin film.

13. The optical illumination system of claim 9, wherein the illuminating source is positioned within the integrating sphere.

14.(Currently Amended) The optical illumination system of claim 9, wherein the illuminating source is positioned outside of the integrating sphere and further comprising:

at least one additional illuminating source positioned within the integrating sphere~~; and wherein the first illuminating source is positioned outside of the integrating sphere~~.

15.(Currently Amended) A method of re-concentrating light within an optical illumination system, comprising:

transmitting a series of light transmission ~~angles~~ from an illuminating source;

directing the series of light transmission ~~angles~~ towards a thin film such that a first portion of the series of light transmissions having a gate angle less than or equal to a gate angle of the thin film is transmitted through ~~an angle gate of~~ the thin film and a second portion of the series of light ~~reflects~~ transmissions having a gate angle greater than the gate angle of the thin film is reflected back from the thin film;

redirecting the second portion of the series of light transmissions towards the ~~angle gate~~thin film; and

generating a final product of light transmissions equaling all light portions transmitted through the ~~angle gate~~thin film~~; and~~

~~wherein the total amount of power concentrated in the AΩ product of light is greater than in an original AΩ product~~.